UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.  | FILING DATE                  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------------------------------|----------------------|---------------------|------------------|
| 10/590,194   | 08/22/2006                   | Taketoshi Chifu      | 038919.58166US      | 6940             |
| 23911<br>CROWELL & I   | 7590 09/17/200<br>MORING LLP | EXAMINER             |                     |                  |
| INTELLECTUAL PROPERTY GROUP<br>P.O. BOX 14300<br>WASHINGTON, DC 20044-4300 |                              |                      | CHARLES, MARCUS     |                  |
|  |                              |                      | ART UNIT            | PAPER NUMBER     |
|  |                              |                      | 3682                |                  |
|  |                              |                      |                     |                  |
|  |                              |                      | MAIL DATE           | DELIVERY MODE    |
|  |                              |                      | 09/17/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
|  | 10/590,194  | CHIFU ET AL.   |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |  |
|  | Marcus Charles  | 3682   |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |  |  |
|  | / IC CET TO EVEIDE AMONTH!  | C) OD THIRTY (20) DAVC   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |   |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 22 Au   | igust 2006  |  |  |  |  |  |  |
| ·— · · · · · · · · · · · · · · · · · ·   | ·= · · · · · · · · · · · · · · · · · ·  |  |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |  |
| •<br>4)⊠ Claim(s) <u>1 and 2</u> is/are pending in the application.  |   |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.   |   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | 8) Claim(s) are subject to restriction and/or election requirement.   |  |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |  |
| 9)⊠ The specification is objected to by the Examine  | r.  |  |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>22 August 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |  |  |  |  |  |  |
| Applicant may not request that any objection to the  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |  |  |  |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:  |   |  |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Information Disclosure Statement(s) (PTO/SB/08)  Notice of Informal Patent Application   |   |  |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/22/06 & 11/14/06.  5) Notice of Informal Patent Application  6) Other:   |   |  |  |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  | · <del></del>   |  |  |  |  |  |  |

Art Unit: 3682

#### **DETAILED ACTION**

This is the first action relating to serial application number 10/590,194 filed 08-22-2006. Claim 1-2 are currently pending.

# **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Drawings**

2. The examiner has accepted the drawing filed with this application as formal drawing.

### Specification

### **Abstract**

3. The abstract of the disclosure is objected to because the abstract is longer than 150 words. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Art Unit: 3682

4. The disclosure is objected to because of the following informalities: the specification is replete with the legal term "said" (for example see 3, line 27; page 4, lines 1, 4, 8 etc.).

In addition, the title and sub-title are not in order. It appears that the title is "Description" and the subtitle is "Hub unit for wheel". Sub-title "Summary" is missing. Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Art Unit: 3682

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Toda et al. (6,363,799). Toda et al. disclose the claimed invention including the hub unit having an outer ring (2) having two raceways (not labeled), a hub (1) having mounting flange (11), a first raceway for accommodating a plurality of bearing balls (23); the hub having an inner ring (21) fixed at one end thereof, the inner ring having a raceway for accommodating a plurality of bearing balls; the ring is fixed by the plastically deforming of the end portion of the hub in the radially outward direction; the bearing balls are provided between the two sets of raceways of the outer ring and the first and second raceways of the hub; wherein the outer diameter of a portion of the end of the hub to be plastically deformed is made smaller that the inner diameter of a portion of the inner ring that is fitted on the hub; the start point of the small diameter (see attached drawing) is arranged to be situated between the start point (21b) of the chamfered portion on the inner circumferential inner surface of the inner ring portion and the vehicle center side end face of the inner ring (21C). Alternatively, It would have been obvious to one of ordinary skill in the art at the time of the invention shape the chamfered portion of the inner ring so that the start point of the small diameter portion is arranged so as to situated between the start point of the chamfered

Application/Control Number: 10/590,194

Art Unit: 3682

portion on the inner ring and the end face of the inner ring element, since it held that a change in the basic shape of a known apparatus would have been a obvious improvement. In re Dailey, 149 USPQ 47 (CCPA 1976).

Page 5

7. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by JP (2000-168306). JP (2000-168306). JP (2000-168306) discloses the claimed invention including the hub unit having an outer ring (2) having two raceways (12), a hub (1) having mounting flange (1a2), a first raceway (11) for accommodating a plurality of bearing balls (3/4); the hub having an inner ring (1b) fixed at one end thereof, the inner ring having a raceway (11) for accommodating a plurality of bearing balls; the ring is fixed by the plastically deforming of the end portion (9) of the hub in the radially outward direction; the bearing balls are provided between the two sets of raceways of the outer ring and the first and second raceways of the hub; a continuous circumferential groove (21) is provided on the inner circumferential surface of the inner ring element adjacent to a chamfered portion on an inner end portion of the inner circumferential surface.

#### Citation

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

Art Unit: 3682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcus Charles
/Marcus Charles/
Primary Examiner, Art Unit 3682